BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work — **Asphalting and improvements to roads at surabhi layout 2nd main and cross road in ward No- 01 of yelahanka sub division.**

Estimate Amount : 4500000.00

Sl. No.	Description of item	Unit	Nos	Dimension L in m	Dimension B in m	Dimension D in m	Total Qty	Rate in Rs	Amount in Rs
	CIVIL WORKS								
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No142., I.No.19.1 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*82.00*							
	Area Wieght age @ 6%	*4.92*							
	Total Rate in Rs	*86.92*							
	Desilting								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)		2	189	0.45	0.600	102.06		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)		2	92	0.45	0.600	49.68		
	New Drain								
	2nd Cross from 2nd main to dead end								
	Ch: (0 - 35)		1	35	1.20	0.800	33.60		
	Culvert								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
			8	6.5	2.00	0.900	93.60		
							278.94	**86.92**	**24245.46**
2	KSRB 5-14 : Providing and constructing non load bearing wall with solid concrete blocks of size 400x100x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00N/mm2 confirming to IS 2185(part 1):2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing , hire charges of machineries etc., complete as per specifications.KBS No 5.4 **(Page No 25., I.No.5.28 of KPWD S.R 2016-17).**								
		Sqm							
	Basic rate	*716.00*							
	Area Wieght age @ 6%	*42.96*							
	Total Rate in Rs	*758.96*							
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	R/s	2	163		0.200	65.20		
	Ch: (0 - 189)	L/s	2	163		0.200	65.20		
							130.40	**758.96**	**98968.38**
3	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2								

Sl. No.	Description of item	Unit	Nos	Dimension L in m	B in m	D in m	Total Qty	Rate in Rs	Amount in Rs
	(Page No 12., I.No.4.2 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	5046.00							
	Area Wieght age @ 6%	302.76							
	Total Rate in Rs	5348.76							
	New Drain								
	2nd Cross from 2nd main to dead end								
	Ch: (0 - 35)		1	35	0.90	0.150	4.73		
	Culvert								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
			8	6.5	1.80	0.150	14.04		
							18.77	5348.76	100369.48
4	KSRB 5.2-3. Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13								
	(Page No 23., I.No.5.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	4187.00							
	Area Wieght age @ 6%	251.22							
	Total Rate in Rs	4438.22							
	New Culvert								
			16	6.5	0.60	0.850	53.04		
							53.04	4438.22	235403.19
5	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.								
	(Page No 113., I.No.15.1 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	97.00							
	Area Wieght age @ 6%	5.82							
	Total Rate in Rs	102.82							
	New Culvert								
			16	6.5		0.850	88.40		
							88.40	102.82	9089.29
6	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	(Page No 12., I.No.4.6 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	5441.00							
	Area Wieght age @ 6%	326.46							
	Total Rate in Rs	5767.46							
	Coping Concrete								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	R/s	2	163	0.10	0.075	2.45		

Sl. No.	Description of item	Unit	Nos	Dimension L in m	B in m	D in m	Total Qty	Rate in Rs	Amount in Rs
	Ch: (0 - 189)	L/s	2	163	0.10	0.075	2.45		
	New Culvert								
			16	6.50	0.60	0.100	6.24		
							11.13	5767.46	64191.83
7	Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc.completeexcluding cost of steel as per MORTH specification No.1500,1700,2200 **(Page No265., I.No.37.59.2 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	10408.00							
	Area Wieght age @ 6%	624.48							
	Total Rate in Rs	11032.48							
	Culvert								
	Raft								
	New Drain								
	2nd Cross from 2nd main to dead end								
	Ch: (0 - 35)		1	35	0.90	0.150	4.73		
	Wall								
	New Drain								
	2nd Cross from 2nd main to dead end								
	Ch: (0 - 35)		2	35	0.15	0.900	9.45		
							14.18	11032.48	156385.40
8	KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 **(Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).**								
		Tonne							
	Basic rate	56050.00							
	Area Wieght age @ 6%	3363.00							
	Total Rate in Rs	59413.00							
	New drain								
	Taking 60kg/cum						0.85		
							0.85	59413.00	50530.76
9	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- **Data rate**								
		Sqm							
	Total Rate in Rs	1757.00							
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	R/s	1	163	0.75		122.25		
	Ch: (0 - 189)	L/s	1	163	0.75		122.25		
							244.50	1757.00	429586.50

Sl. No.	Description of item	Unit	Nos	Dimension L in m	B in m	D in m	Total Qty	Rate in Rs	Amount in Rs
10	Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge-								
	Data rate								
		Sqm							
	Total Rate in Rs	***4725.00***							
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
			8	6.5	1.80		93.60		
							93.60	**4725.00**	**442260.00**
	Sub total-1								**1611030.30**
	ROAD WORKS								
11	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301								
	(Page No 143., I.No.19.14 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***46.00***							
	Area Wieght age @ 6%	***2.76***							
	Total Rate in Rs	***48.76***							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)		1	189	6.90	0.450	586.85		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)		1	97	5.60	0.450	244.44		
							831.29	**48.76**	**40533.46**
12	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material								
	(Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***1571.00***							
	Area Wieght age @ 6%	***94.26***							
	Total Rate in Rs	***1665.26***							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)		1	189	6.90	0.150	195.62		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)		1	97	5.60	0.150	81.48		
							277.10	**1665.26**	**461435.22**
13	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406								

Sl. No.	Description of item	Unit	Nos	Dimension L in m	B in m	D in m	Total Qty	Rate in Rs	Amount in Rs
	(Page No 158., I.No.20.18 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	1668.00							
	Area Wieght age @ 6%	100.08							
	Total Rate in Rs	1768.08							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	nc	1	189	6.90	0.225	293.42		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)	nc	1	97	5.60	0.225	122.22		
							415.64	1768.08	734889.19
14	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502								
	(Page No 161., I.No.21.6 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	26.00							
	Area Wieght age @ 6%	1.56							
	Total Rate in Rs	27.56							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	nc	1	189	6.90		1304.10		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)	nc	1	97	5.60		543.20		
							1847.30	27.56	50911.59
15	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5								
	(Page No 161., I.No.21.7 of KPWD S.R 2016-17).								
	Basic rate	11.00							
	Area Wieght age @ 6%	0.66							
	Total Rate in Rs	11.66							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)	nc	1	189	6.90		1304.10		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)	nc	1	97	5.60		543.20		
							1847.30	11.66	21539.52
16	KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507								
	(Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).								
		Cum.							

Sl. No.	Description of item	Unit	Nos	Dimension L in m	B in m	D in m	Total Qty	Rate in Rs	Amount in Rs
	Basic rate	*6071.00*							
	Area Wieght age @ 6%	*364.26*							
	Total Rate in Rs	*6435.26*							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch. (0 - 189)	nc	1	189	6.90	0.050	65.21		
	5th Cross road from dead end to 2nd main								
	Ch. (0 - 92)	nc	1	97	5.60	0.050	27.16		
							92.37	**6435.26**	**594392.79**
17	KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 **(Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*6859.00*							
	Area Wieght age @ 6%	*411.54*							
	Total Rate in Rs	*7270.54*							
	new contruction								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch. (0 - 189)	nc	1	189	6.90	0.030	39.12		
	5th Cross road from dead end to 2nd main								
	Ch. (0 - 92)	nc	1	97	5.60	0.030	16.30		
							55.42	**7270.54**	**402926.06**
18	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 4kms. **(Refer Table. Page No.140)**								
		Cum.							
	Basic rate	*80.80*							
	Total Rate in Rs	*80.80*							
				For item no	1		278.94		
				For item no	11		831.29		
							1110.23	**80.80**	**89706.18**
				Sub total-1					**2396334.01**
	ROAD FURNITURES								
19	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 185, I.No.24.15 of KPWD S.R 2016-17).								
		Sqm							
	Basic rate	**512.00**							
	Area Wieght age @ 6%	*30.72*							
	Total Rate in Rs	*542.72*							

Sl. No.	Description of item	Unit	Nos	Dimension L in m	Dimension B in m	Dimension D in m	Total Qty	Rate in Rs	Amount in Rs
	Road Marking								
	Surabhi layout 2nd main road from Jakkura Main road to dead end								
	Ch: (0 - 189)		2	189	0.10		37.80		
	5th Cross road from dead end to 2nd main								
	Ch: (0 - 92)		2	95	0.10		19.00		
							56.80	542.72	30826.50
	Sub Total-3								30826.50
	Total								4038190.81
20	Cost towards Preperation of DPR,PMC/QC @ 2%								80763.82
21	Cost of Plastic@ 8% of bitumen qty for BC	Kg	1	625.13				27.00	16878.41
22	Cost towards KIRDL Charges @ 9%								363437.17
23	Miscllenous and other charges								729.79
	Grand Total								4500000.00

Certificate:-

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Mecadez Core Technologies Private Limited MECADEZ

Consultant:
For M/s Mecadez core technologies pvt ltd

Asst. Engineer
Ward No:1
BBMP

AEE
yelahanka Sub division
BBMP

Executive Engineer
yelahanka division
BBMP

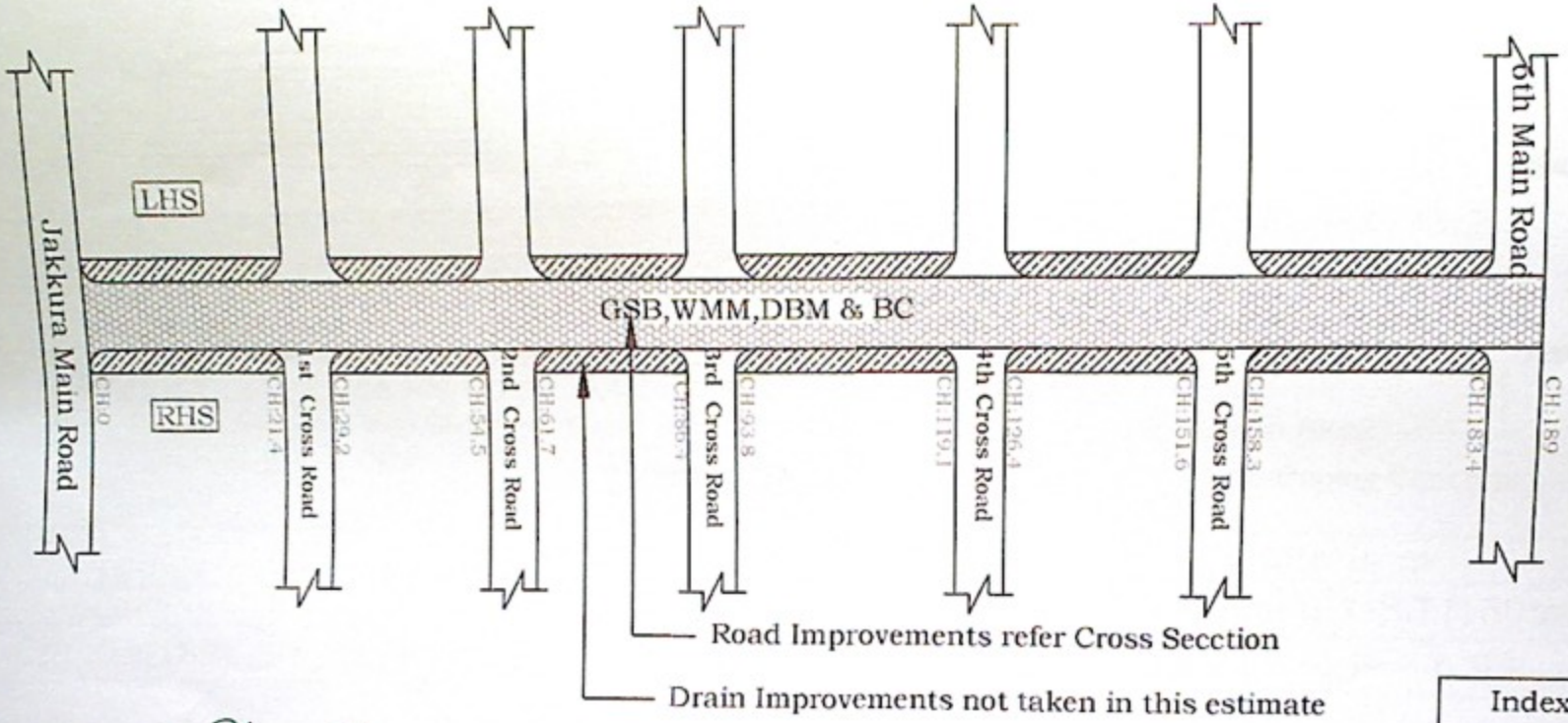
ADMINISTRATIVELY SANCTIONED FOR Rs. 45.00 lakhs
Rupees forty five lakhs only
[illegible]
[illegible] EE ( ) [illegible]
[illegible] to conditions contained in
enclosed memo EE ( ) No. [illegible]/9/...
Dt. [illegible] Estimate A/S sanctioned
JC(Y) [illegible] 45/16-17
dated 18-3-2017 Rs. 45.00 lakhs

Joint Commissioner
(Yelahanka Zone)
BBMP Bengaluru-92

Technical Sanction
Accorded For 45.00 lakh Rs.
Head of A/C P 3089
CER NO : 211 Dt: 28/03/17

TA CE (YNK)

Surabhi layout 2nd main road from Jakkura Main road to dead end



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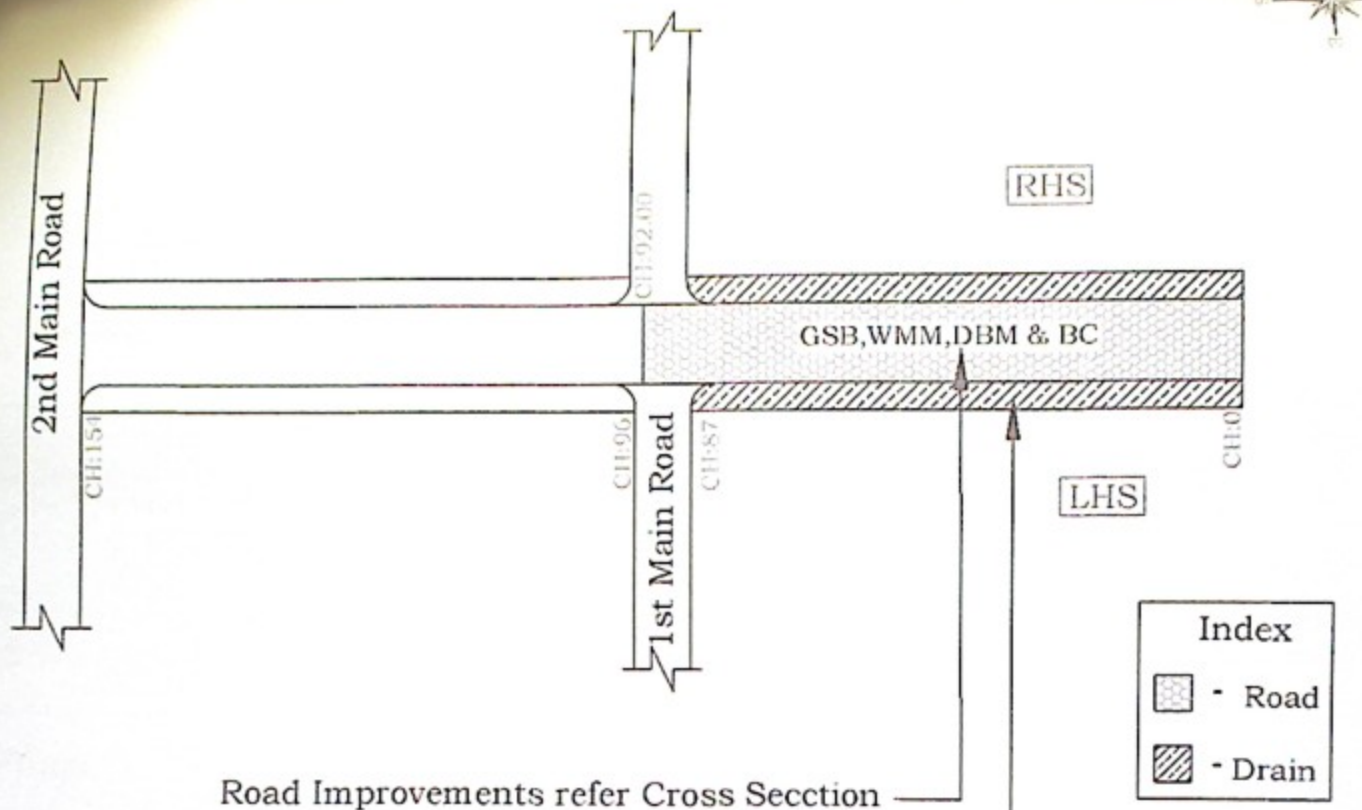
Assistant Engineer
Ward No - 1
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at surabhi layout 2nd main and cross road in ward No- 01 of yelahanka sub division.	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Private Limited Project Management and Consultancy No.103, 1st Main Road, 3rd Cross, Magadi Main Road, Kottigepalya, Bangalore-560091

5th Cross road from dead end to 2nd main



Assistant Engineer
Ward No - 1
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

PROJECT NAME	DRAWING TITLE		CONSULTANTS
Asphalting and improvements to roads at surabhi layout 2nd main and cross road in ward No- 01 of yelahanka sub division.	Strip Plan	BRUHAT BENGELURU MAHANAGARA PALIKE	M/s. Mecadez Core Technologies Private Limited Project Management and Consultancy No.193, 1st Main Road, 1st Cross, Magadi Main Road, Kottigepalya, Bangalore-560091